				СОММЕ	NTS FROM PUBLIC REVIEWERS	AUTHOR'S RESPONSE							
Comment Number	Reviewer ID	Chapter	Page	Line	Comment Text	Acknowledged, but no further reponse or revisions are required	Revisions have been incorporated as suggested in the comment	Agree, but see "Notes on Response"	Agree, but elaboration is precluded by length limitations	Disagree; see "Notes on Response"	Beyond scope of report/chapter	Notes on Response	
P-001		Preface	iv	3-7	Preface, Page vii, Lines 3-7: The Global Change Research Act of 1990 ("GCRA") requires the Climate Change Science Program ("CCSP") to prepare, not less frequently than every 4 years, a scientific assessment which [original comment provides lengthy list of requirements here]. The CCSP is also terribly out of compliance with its statutory obligation to produce an updated report. The CCSP has stated that it intends to meet its obligations via the issuance of 21 separate reports, of which Assessment Product 2.2 is one. Originally intended for release between 2005 and 2007, the CCSP is now apparently nowhere close to meeting this schedule.	х						Any response is well beyond the scope of this report, and the authority or perview of the report's author.	
P-002	10	Preface	iv	3-7	While the production of 21 Assessment Products is no doubt of great scientific value, these Products cannot substitute for a single, coherent, accessible, and updated National Assessment that can be used by agencies and decision makers in the innumerable decisions that implicate mitigation of and adaptation to climate change in the United States. Even if the separate Assessment Products could substitute for a complete, accessible, and updated National Assessment, the lengthy delay in completing them is nothing less than an informational disaster. Agencies are either forced to reinvent the wheel when analyzing climate change issues, or, as is unfortunately infinitely more common, they ignore the issue altogether or give it only cursory coverage. This is simply an unacceptable state of affairs.	Х						See response to Commment # P-001 above	
P-003	10	Preface	iv	3-7	For these reasons the Center for Biological Diversity urges the CCSP immediately take steps to produce the required National Assessment as soon as possible.	х						See response to Commment # P-001 above	
P-004	12	Preface	vii	14-16	The extent of influence this report will have on the current IPCC assessment seems, at best, non-demonstrable, given the timeline of the respective drafts.		х					The text in this SAP 2.2 has been revised to avoid any implication that it would contribute to the IPCC assessment report, due to the timing of the finalization of the two reports	
P-005	12	Preface	vii	17 ff	Most of the preface is taken verbatim from the SAP 2-2 Prospectus, which was drafted by U.S. Government officials and includes the assurance that, " the U.S. Government will not exert management or control over the activities of the contractor nor will U.S. Government officials play a role in selecting authors, holding meetings, setting the agenda, or drafting the final report." The verbatim repetition of the Government prospectus suggests a lack of diligence or independence (or both) on the part of the contractor.					х		The Preface is not intended to demonstrate the diligence or independence of the Authorship Team; the remainder of the Report provides such evidence. The Preface is intended to inform the reader about the background of the CCSP's Synthesis and Assessment process and this SAP 2.2 Report, in particular.	
P-006	12	Preface	vii	19	Carbon capture and storage (CCS) is a purposeful management option receiving major attention and investment. It is discussed in chapters 6 and 8 of this report, but not mentioned at all in the Executive Summary, and mentioned only superficially in Chapter 4. This uneven treatment leaves no basis for evaluating the potential of CCS relative to the potential for purposeful sequestration in forests and agricultural lands, or the potential for reducing emissions. This is a significant shortcoming in the report's assessment of management options.		х					Revisions expand coverage of carbon capture and storage in Chapter 4 and the Executive Summary.	

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P-007	12	Preface	vii	25-29	It is surprising to read that this report "will be coordinated" with other CCSP synthesis and assessment products. When will this occur? Given the magnitude of the SAP effort, this sort of coordination should be an accomplished fact, not a vague promise (in this case, repeated verbatim from the SAP2-2 Prospectus). The need for coordination is especially evident with respect to SAP 2-1 (emissions scenarios), which overlaps substantially with the SAP 2-2 goal to "discuss and assess current accepted projections of the future of the N.A. carbon budget."		х					See the response to Comment # P-004	
P-008	13	Preface	vii	21-25	The text states that the draft SAP 2.2 report "covers North America's lands, atmosphere, inland waters, and adjacent oceans, where 'North America' is defined as Canada, the United States of America, and Mexico," and "provides a baseline against which future results from the North American Carbon Program (NACP) can be compared." Yet, on the same page, lines 10-16, the Preface states that the draft report will (1) summarize "our knowledge of carbon cycle properties and changes relevant to the contributions of and impacts upon the United States and the rest of the world" and "(2) provide scientific information for the U.S. decision support focused on key issues for carbon management and policy" (emphasis added and footnote omitted).		х					The text has been revised to focus on North America	
P-009	13	Preface	vii	21-25	The draft's Glossary definition of "North America" (p. A-2) is more limited in scope. It does not include the "atmosphere" and "inland waters," and refers to "coastal waters" rather than "adjacent oceans" of such countries. Technically, the reference to coastal waters may be better since the Gulf of Mexico and some waters off the coast of Alaska are not oceans, nor are some waters off Canada, such as the Labrador Sea, Hudson Bay and the Gulf of St. Lawrence. In addition, we understand that internationally, oceans beyond 12 miles are generally not recognized internationally as part of any country, except for fishing purposes.		X						
P-010	13	Preface	vii	21-25	The Preface adds that "this Report promises to be of significant value to decisionmakers, and to the expert scientific and stakeholder communities. For example, we expect this Report to be a major contributor to theIPCCFourth Assessment Report (due to be published in 2007)" (emphasis added).		Х					See the response to Comment # P-004	

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P-011	13	Preface	vii	21-25	As the Prospectus explains, the SAP 2.2 draft report is to be "focused" on "North America's carbon budget," which covers three countries, not just the U.S. Yet the above-numbered clauses quoted above apply to only one of the three countries, the U.S. The absence of any reference to the other North American countries leaves an impression that the report's summary of "knowledge of the carbon cycle properties and changes" and its provision of "scientific information" will not be "of significant value" to the decision-makers and scientific and stakeholder communities of Mexico and Canada. We presume that is not the intent of the authors. In any event, notwithstanding section 1.2 of the Prospectus, the reference to the "United States" and the "U.S." should, in each case, be to "North America," and no one country should be singled out in the draft report.		X						
P-012	13	Preface	vii	21-25	Regarding the expectation in the Preface that the draft report would be a "major contributor" to the IPCC's 4th Assessment Report, that does not appear to be possible for at least two reasons. First, according to section 9, "Proposed Timeline," of the final Prospectus, this draft report is not scheduled to have its review "completed" by the CCSP until March 2007 and hence could not be submitted to the IPCC prior to completion.		Х					See the response to Comment # P-004	
P-013	13	Preface	vii	21-25	Second, we understand that IPCC Working Group I's draft assessment is nearly complete and will be undergoing review, approval and acceptance at a meeting of the Working Group in January-February 2007. Clearly, according to the IPCC's "Procedures for the Preparation, Review, Acceptance, Adoption, Approval and Publication of IPCC Reports," the IPPC will be unable to consider this draft report at that time. We recommend that the reference to such contribution by the CCSP be deleted from the Preface.		х						
P-014	13	Preface	vii	Ftnote 1	This footnote states that the term "impacts" as used in the draft report "refers to specific effects of changes in the carbon cycle, such as acidification of the ocean", etc. and "is not used as a shortened version of 'climate impacts', as was adopted for the Strategic Plan for the U.S. Climate Change Science Program" in the Appendix D "Glossary of Terms" for that Plan. This current draft report also includes a "Glossary" of terms (p. A-1). However, the definitions and explanations of some of the terms in the draft Glossary differ from the definitions of the same terms in the above-referenced "Glossary of Terms" for the Strategic Plan, which includes a Chapter 7, titled "Carbon Cycle" (p. 71). Some examples of terms with differing definitions and explanations are: "carbon cycle," "ecosystem," "greenhouse gases," "mitigation," "source" and "uncertainty." There are no explanations provided for these differences.		Х					The Glossary (in Appendix A) has been revised with respect to consistency with the CCSP definitions described in the comment	

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P-015	13	Preface	vii	Ftnote 1	Since the draft report and the Prospectus both emanate from the Strategic Plan, one would expect that the Glossary terms defined therein – including the above-referenced terms and ones such as "Climate," "Climate Change," "Global Change," "Information," "Policy Decisions" and "Stakeholders" that are also defined therein – would apply to the draft unless, such as in the case of the term "impact," there is a provision in the draft explaining why the definitions differ from those in the Plan's Glossary. Yet with the one exception, there does not appear to be such explanations. Accordingly, we recommend that 1) the definitions in the CCSP Strategic Plan should apply to the draft report unless there are reasons for different definitions and these reasons are expressed in the draft, and 2) the proposed differing definitions in the draft's Glossary for terms that are in the Plan's Glossary should be deleted.	х						The CCSP Strategic Plan explicitly covers "climate change" whereas this SAP 2.2 Report is focused solely on the carbon cycle and not on any potential climate effects	
P-016	12	Preface	viii	9-11	Preface, Page viii, Line 9-11: The report's "discussion and assessment" of current accepted projections of the future of the N.A. carbon budget is superficial and not well integrated. The report's treatment of future projections ranges from superficial (e.g. ch. 1 p. 6 lines 2-4: "The future can't be known, but understanding it's [sic] past and present will increase confidence in projections of future carbon cycle behavior for appropriate consideration by decision makers.") to somewhat substantive (e.g., ch. 2 p. 1 lines 22-24 and p. 8 lines 13ff). The report does not contain anything approaching a real assessment of future projections.		Х					Bullet has been deleted from Preface to more accurately reflect the scope and focus of the Report	
P-017	12	Preface	viii	19-21	Preface, Page viii, Line 19-21: The report does not "identify where NACP-supported research will reduce current uncertainties in the NA carbon budget and where future enhancements of NACP research can best be applied to reduce critical uncertainties." The NACP is mentioned only once in the entire report (in chapter 5, in the context of the need for more decision support). Because the NACP is the flagship of US basic carbon-cycle research, the report's failure to assess the program's current progress and future directions must be viewed as a significant shortcoming.					Х		The report is not intended as a science or research plan for NACP. The indicated text is meant in the generic sense that in acting as a baseline against which results from NACP can be compared (noted earlier in the preface), the report does identify uncertainties and research needs (in individual chapters and in the Executive Summary) that can be evaluated by NACP investigators and program managers on how there research can address these needs.	
P-018	13	Preface	viii	25-28	We have several comments about this "broad audience" list: First, the word "includes" suggests that, in fact, the above list is not exhaustive, but merely illustrative of the scope of the audience. Yet the list is so comprehensive, it is difficult to imagine what other groups could be included and, more importantly, in what category they would fit. We suggest that the word "include" be changed to "are."					Х		A question of semantics. The intended audience of the report does indeed incluce the indicated broad audience.	

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P-019	13	Preface	viii	25-28	Second, the draft Glossary includes a definition of both the "public sector" and the "private sector." Neither definition is particularly helpful. In the case of the "public sector," the definition is also inconsistent with the parenthetical in the list above, which refers solely to governments. The definition refers to the "collective set of entities directly associated with the functions" of government, which arguably could include contractors performing governmental functions. Moreover, the use of a negative to distinguish the private sector from the public sector is not a meaningful definition of the private sector. Furthermore, we do not understand what the terms "functions" and "interest areas," as distinguished from "entities," encompass in trying to define the public sector. We suggest that both definitions be abandoned.		x						
P-020	13	Preface	viii	25-28	Third, the reference in the parenthetical of the list above concerning the public sector and in the Glossary definition above of the term "public sector" to "federal, state, and/or local governments" may be generally appropriate for the public sector in the U.S., but it does not appear to be appropriate for Canada, with its provincial units of government or for Mexico's governmental units, which is a federal republic composed of 31 states and a Federal District, which is Mexico City. Even in the U.S., the three aforementioned governmental units would not include all governmental entities, such as regional and interstate authorities and commissions. In any event, such definition or listing should apply to all three countries. Clearly, the reference to federal, state and local governments is not appropriate for North America as a whole.		Х						
P-021	13	Preface	ix	4-17	This paragraph also focuses on the "United States" and the "U.S." in several places (i.e., lines 6, 10, 13 and 16). In each case the reference should be to "North America," as we note that most of the bulleted questions that follow this paragraph focus on North America. None refers to the U.S.		Х						
P-022	8	Preface	ix	28-29	Need to include an assessment of uncertainties regarding application of scientific information to decision support for carbon management and climate decision making.		Х					See the revised Chapter 5.	